

# REPORT

BY THE

MANAGERS of the ROYAL EDINBURGH LUNATIC ASYLUM for the Year 1844, presented to the ANNUAL GENERAL MEETING, held on Monday, 27th January 1845.

IN submitting their Report on the Asylum for 1844, the Managers have much pleasure in being enabled to congratulate the public on its rapid advance during the last four years, and on the distinguished position to which it has now attained among institutions of a similar kind.

At the close of 1840 the total number of inmates was 39— at the present date it is 367. Again, its ordinary income for the year 1840 was £2,224 : 18 : 11, and that for the year 1844 was £7,364 : 4 : 7.

Stimulated by a deep sense of the growing wants of society, and encouraged by the liberal contributions obtained through the zealous efforts of their late treasurer Mr William Scott, the Managers, in 1840, commenced the erection of the extensive department for inmates of the poorer class, which has now been completed at an expense of £36,000. When this measure was first proposed, the funds at their disposal did not much exceed £10,000 ; but since that time they have obtained, in subscriptions and legacies, nearly £15,000 more, leaving a debt of about £11,700, which they have not hesitated to incur, rather than leave the work imperfect. Of this large expenditure about 300 is for raising a supply of water which has been

obtained, close by the washing-house, in great abundance and of excellent quality; but as the annual payment of £50 to the Water Company will henceforth cease, there will be no loss, but rather gain, to the Institution from this expense.

The new buildings, although of plain exterior and simple arrangement, are constructed according to the most approved principles; and, having been raised under the eye of Dr Mackinnon, the resident physician, he has been enabled to offer many valuable suggestions towards rendering them every way suitable for the object in view. They will now accommodate about 400 inmates, in equal numbers of both sexes; and, owing to their being sub-divided into apartments of a large size, the number may be diminished or increased according to circumstances, without materially affecting the general arrangements of the Institution. Another and still more important advantage of this plan is, that thereby the inmates are enabled to enjoy greater comfort, and the attendants to exercise more efficient control, than is attainable under the cell system of construction.

There is now a spacious hall in the centre building for public worship, and for other occasions when the inmates are assembled together; and suitable apartments have also been provided for the officers, &c. The experience of the physician has likewise enabled him to simplify the arrangement of the airing yards, or rather to alter their character entirely, by throwing down all the partitions, and converting them into spacious gardens, for the use of those inmates who cannot engage in the exercises which are carried on in the open grounds. The agreeable aspect thus given to the place, and the various means of occupation and amusement which are afforded both within and without the buildings, combine to present such institutions in altogether a new light, and to banish those gloomy ideas which have been so long attached to them. Indeed it is now certain that, under a well-regulated system, their inmates may enjoy as much comfort, with nearly as much freedom and social intercourse, as in any other institution whatever; and, on the other hand, there is no class of persons who more relish these advantages, or who, when associated together, conduct themselves with more general decorum and propriety.

It is with satisfaction that the Managers have now to re-



port the transfer to Morningside of the inmates of Bedlam, under an arrangement made with the city to that effect—in consequence of which also two gentlemen deputed by the Town Council will in future represent the City at the Board of Ordinary Management. The Managers have always wished to consider the Asylum as *primarily* intended for Edinburgh and the surrounding district; and although they were bound in justice to other parties who have acquired an interest in it, to stipulate for a contribution from the city towards defraying the cost of the new buildings, that contribution was fixed at a sum which is very far from being equal to the cost of the accommodation now occupied by the city patients. Indeed the whole arrangement for the transfer of these patients to Morningside was never regarded by the Managers as one of a *pecuniary* character at all, and it could not have been gone into except under the feeling that in granting to the city, on the most favourable terms, the full benefit of this asylum for its insane poor, they were only carrying into effect one of the great objects contemplated by that benevolent and patriotic citizen, Dr Duncan, to whose unwearied exertions the community are indebted both for its origin and for much of its early progress.

The finances of the Institution have necessarily been much depressed by the extensive works lately undertaken; and, doubtless, so large a debt as £11,700 cannot be regarded without some degree of anxiety; but while, on the one hand, the Managers have reason to hope that towards the gradual liquidation of this debt some amount of surplus income will annually arise, as heretofore, they have, on the other hand, good ground for reliance that those whose liberality has already so much conduced to the support of the Institution, will not now allow it to languish for want of the funds necessary to its efficient operation.

It is hardly possible to overrate the benefits that would result were the Managers enabled to admit more readily at a reduced rate of board, or altogether gratis, that numerous class of the insane who, although not in the condition of paupers, are often entirely without the means of subsistence when away from home, and whose relatives struggle, amid untold difficulties, to keep them from becoming the dependents on public charity. With this unfortunate class the Managers have al-

ways deeply sympathized, and, from the first have received them into the Asylum at rates of board more or less inadequate to the expense of their maintenance; but they have never been able to apply this charitable feature in a degree at all co-extensive with the demands which are constantly made upon them. If possessed of sufficient funds, they could also enable the resident physician to carry out more fully his plans for ameliorating the general condition of the insane poor, than is practicable while debt remains on the Institution.

JOHN BOWIE, *Chairman.*

# ABSTRACT

OF THE

## TREASURER'S ACCOUNTS FOR THE YEAR 1844.

### INCOME AND RECEIPTS.

#### I. ORDINARY.

1. Amount of Board for Patients,	-	L.6,847	14	7½	
Less Board of Three Life Patients,		36	5	10	
					L.6,811 8 9½
2. Dividends on Bank Stock, (less Income Tax,)	-	-	-	-	133 19 6
3. Rent of Grounds Let, Crop 1843,	-	L.144	17	2	
And Produce, &c. sold,	-	139	8	4	
					284 5 6
4. Sundries,	-	-	-	-	134 10 10
					L.7,364 4 7½

#### II. EXTRAORDINARY.

1. Subscriptions and Legacies paid,	-	L.471	16	1	
2. Additional Loans,	-	L.2,750	0	0	
Less Loan paid off,	1,000	0	0		
					1,750 0 0
3. Price of Bank Stock sold,	-	-	3,869	12	6
4. For Two Life Patients, &c.	-	-	498	8	0
					6,589 16 7
Total Receipts,	-	-	-	-	L.13,953 11 2½

### EXPENDITURE.

#### I. ORDINARY.

(1.) Disbursements for the Institution—viz.,					
1. Provisions, Coals, &c.	-	-	L.3,246	18	10½
2. Wages of Attendants, &c.	-	-	979	18	6
3. Repairs and Furnishings,	-	-	938	7	6
4. Taxes and Assessments,	-	-	58	16	1
5. Insurance against Fire,	-	-	31	1	9
6. Gas,	-	-	79	9	7
7. Feu-Duty, less Income-Tax,	-	-	384	9	0
8. Interest on Loans, &c.	-	-	385	8	5½
9. Miscellaneous,	-	-	98	12	4
					L.6,203 2 1
Carry forward,			L.6,203	2	1
					L.13,953 11 2½



	Receipts brought forward,	-	-	L.13,953	11	2½
	Expenditure continued,	L.6,203	2	1		
(2.)	Salaries, &c.—viz.,					
	1. Resident Physician, at					
	L.300, - - -	L.275	0	0		
	2. Assistant do. at L60,	37	10	0		
	3. First Matron, at 70,	67	10	0		
	4. Second do. - - -	45	0	0		
	5. House Steward, - -	35	0	0		
	6. Gardener and Gate-					
	Keeper, at L55, -	53	15	0		
	7. Consulting Physician,	25	4	0		
	8. Chaplain, - - -	40	0	0		
	9. Secretary and Clerk,	26	5	0		
	10. Treasurer and Clerks,	100	0	0		
			705	4	0	
			L.6,908	6	1	

## II. EXTRAORDINARY.

(1.)	Payments on Account of New Buildings—					
	viz.					
	1. Excavations, &c.	L.80	17	4½		
	2. Mason, - - -	2,100	0	0		
	3. Wright, - - -	2,200	0	0		
	4. Plumber, - - -	400	0	0		
	5. Slater, - - -	222	17	0		
	6. Plasterer, - - -	140	0	0		
	7. Engineer, - - -	95	0	0		
	8. Measurer, - - -	31	10	0		
	9. Well Digger, - -	5	0	0		
	10. Furniture, &c. -	522	8	7		
	11. Agent's Account for					
	Business and Dis-					
	bursements, &c.	108	9	4½		
			5,906	2	4	
(2.)	Mr Hughes' Retired					
	Allowance, - - -	57	7	6		
(3.)	Sum voted to Mr M'Kay					
	as a Compensation,	10	0	0		
			67	7	6	
			L.5,973	9	10	
				12,881	15	11
	Balance remaining,	-	-	-	-	L.1,071 15 3½
From which Deduct—						
	1. Balance due to Treasurer at 31st December					
	1843, - - - - -	L.113	12	6		
	2. Balance due to Royal Bank at ditto,	25	9	8		
			L.139	2	2	
	Less Arrears of Board due at 31st De-					
	cember 1843, - - -	L.72	11	3		
	Deducting ditto at 31st					
	December 1844,	50	12	2½		
			21	19	0½	
				117	3	1½
	Balance in Treasurer's hands at 31st December 1844.*			L.954	12	2

\* This balance has since been expended.

# ABSTRACT

OF THE

## ORDINARY INCOME AND EXPENDITURE.

Amount of Ordinary Receipts, as before,	-	-	-	L.7,361	6	7½
Do. do Payments do. - -	L.6,910	6	1			
Add for Water-Duty, Gas, &c., still due,	101	12	8½			
				<u>7,011</u>	<u>18</u>	<u>9½</u>
Nett Surplus on the Year,	-	-		L.349	7	10

## STATE OF THE FUNDS AT 31st DECEMBER 1844.

### I. DEBTS AND LIABILITIES

1. Amount of Promissory Notes, - - - -	L.11,850	0	0
2. Accounts for the Quarter ending this date, - -	1,272	17	10
3. Balance due for additional Buildings, Steam-Engine, &c., say - - - -	1,950	0	0
4. Sundries, say - - - -	293	7	8½
	<u>L.15,366</u>	<u>5</u>	<u>6½</u>

### II. ASSETS.

1. Subscriptions and Legacies outstanding, say	L.2,200	0	0
2. Arrears of Board - - - -	51	13	4½
3. Rent of Grounds, Crop 1844, and Value of Produce, Provisions, &c. on hand, say	460	0	0
4. Balance in Treasurer's hands at 31st December 1844, - - - -	954	12	2
	<u>3,666</u>	<u>5</u>	<u>6½</u>
Deficiency, - - - -	L.11,700	0	0

*List of the principal Articles of Provision, &c.  
consumed in 1844.*

Roasting Meat,	-	7,373 lbs.	Tea,	-	595 lbs.
Boiling do.	-	19,399 —	Coffee,	-	1,562½ —
Houghs,	-	13,188 —	Raw Sugar,	-	5,106½ —
Oxheads,	-	12,702 —	Lump do.	-	386½ —
Pork,	-	853 —	Salt,	-	4,522 —
4 lb. Loaves,	-	10,651	Beer,	-	6,023 galls.
6 oz. do.	-	126,887	Porter,	-	500 —
Oatmeal,	-	48,314 lbs.	Mustard,	-	83 lbs.
Flour,	-	2,463½ —	Vinegar,	-	51 bottles.
Barley,	-	9,664 —	Black Pepper,	-	68 lbs.
Rice,	-	720 —	White Soap,	-	412½ —
Sago,	-	414 —	Brown do.	-	2,347½ —
Pease,	-	5,295 —	Soft do.	-	1,174½ —
Fresh Butter,	-	242 —	Soda,	-	1,660 —
Salt do.	-	2,430½ —	Starch,	-	195 —
Sweet Milk,	-	2,109¼ galls.	Candles,	-	182 —
Skimmed do.,	-	9,989 —	Blacking,	-	96 bottles.
Cheese,	-	114¼ lbs.	Currants,	-	245 lbs.
Eggs,	-	418½ doz.	Arrow Root,	-	90 —

*List of Vegetables consumed.*

Artichokes,	-	38 dishes	Onions,	-	3,217 lbs.
Beans,	-	38½ pecks	—	-	1,493 bdles.
Beet,	-	287 lbs.	Parsley,	-	705 —
Broccoli,	-	2,000 heads.	Pease,	-	426½ pecks.
Brussels Sprouts,	-	183½ galls.	Potatoes,	-	407 bolls.
Carrots,	-	1,371 lbs.	Rhubarb,	-	85 doz.
—	-	1,233 bdles.	Radish,	-	81 —
Cabbage,	-	12,020 heads.	Spinach,	-	56 galls.
Cauliflower,	-	2,097 —	Savoys,	-	3,498 heads.
Cellery,	-	249 —	German Greens,	-	1,122 —
Kidney Beans,	-	113 quarts.	Turnips,	-	10,872 lbs.
Leeks,	-	1,575 bdles.	—	-	1,200 doz.

Daily average number of Patients in 1844,  
Males 149.43.—Females 144.35—Total 293.78.

Daily average number of Officers and Domestics Boarded,  
Males 29.77.—Females 31.71.—Total 61.48.

*N. B.*—In reference to the consumption of Vegetables, 10 must be added to the latter number.



# PHYSICIAN'S REPORT

FOR 1844.

*Read at the General Meeting held on the 27th January 1845.*

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DURING the year 1844 there were admitted into the Institution 162 patients of all ranks; discharged during the same period 123, of whom were recovered 90, more or less improved 33; and there died 20. The mean number of patients resident during the year was 293.78.

These returns are more favourable than from the nature of the cases under treatment—embracing so many incurable and so many debilitated—I ventured to anticipate. The recoveries are in the ratio of 30.63 per cent. to the mean number resident, and 55.55 per cent. to the number of admissions; while the deaths are 6.8 per cent. to the former, and 12.34 per cent. to the latter. Were incurables to be excluded, the proportion of recoveries would be very high. An institution placed in the circumstances in which this has been for the last three years, receives even a greater than the usual proportion of unfavourable cases. Besides that number to which all asylums, exercising no exclusion in regard to the cases admitted, are liable, there are generally transferred to every new County, or similar Asylum, the incurable residue of Workhouses and other occasional receptacles for the insane. The last of these merged in this asylum has been the City Bedlam; but it is proper to mention that only a certain number of the patients removed from it are included in the returns of the past year; the transfer of these patients having taken place gradually, and the largest number falling to be included in the returns of the present year.

The event to which I have just alluded is one upon which all who are interested in the condition of the insane poor have reason for congratulation. It is another recognition of the principle that institutions built and organized expressly for the purpose are alone adapted for the cure and treatment of the insane. I avail myself of this opportunity to bear willing testimony to the kind care bestowed upon the inmates of the Lunatic Department of the City Workhouse by the officers attached to it. To Dr Smith this acknowledgment is most

justly due, as well as to Mr Mackay, who ably seconded every good endeavour to promote the recovery or ameliorate the condition of the insane poor of the city. It will be my endeavour to make the more ample means confided to my direction conducive to the same benevolent end.

At the conclusion of the Report, the facts of the year, as regards the Admissions, Removals, and Deaths, will be found arranged in tabular forms. On these I shall make a few remarks, premising that the returns of any one year are not to be regarded as of great importance, either in reference to the statistics of the Institution or of the disease generally. Sometime hence our more extended experience will be recorded, for which there are ample materials at command in the registers of the Institution, which have been so framed that this can be done with comparative ease, and in such a manner as to present the most interesting facts in different points of view. The Retreat, at York, by the labours of Dr Thurnam, has set an admirable example of such a contribution to the statistics of insanity.

In reference to the Tables of the Age, Social Condition, Education, and Occupation of those admitted, nothing need be remarked. From the Table of Temperaments it appears that the bilious and sanguine predominated. Table No. VIII. shews that of those admitted the far greater number (134) were of fair, and only 28 of dark complexion. The Table of Hereditary Predisposition shews in how considerable a proportion this cause existed. In 28, in whom the distinction could be made, the predisposition was maternal in 15 and paternal in 13. It existed on both sides in 4. It may be here mentioned that at present there are six instances of two members of the same family, and one instance of three, being fellow-inmates of the Institution. In the Table illustrative of the forms which the disease assumed, it will be observed that 5 cases are classed under the head of Moral Insanity. In one young girl this, perhaps, ill-defined form of the disease was displayed in singular perversity of will and indifference to considerations which weigh with sane minds of her sex; in another, in the most depraved *morale*, and Destructiveness indiscriminate in its objects. In neither was there any delusion or incoherence. In a third female it was manifested in those fearful impulses to suicide and homicide which, often restrained and even calmly reasoned on, sometimes hurry on the victims to acts of atrocity the most horrible and revolting. A boy, eighteen years of age, who was, unfortunately for observation of his interesting case, only one day in the Asylum, was another example of this impulsive form of moral derangement. The remaining female, classed as morally insane, approached nearly to the state of mania; but it was in her moral feelings that



her derangement was principally displayed. Four cases are included under the head of *Delirium Tremens*. Some of those might have been classed as *Oinomaniacs* the insane impulse leading to insatiable indulgence in the use of spiritous liquors. Among those included under *Monomania* it will be noted in how many this assumed the forms of suspicion and unseen agency. The latter often takes its hue from the latest discovery or delusion of the time. Thus at one time it has reference to galvanism—at another to gas—at another to the daguerrotype—at another to Mesmerism. It was the monomania of one patient that he had been deprived of a “Mental Conversation Instrument,” which, in the hands of others, was diffusing knowledge, enlightening ignorance, and advancing the destinies of mankind. Table XI. gives a view of the Exciting causes with which it is to be understood that predisposing ones were often combined, especially poverty, hereditary taint, and scrofulous constitution. Intemperance was the most common of the immediate causes of the disease, and next in frequency religious excitement, although it is always difficult to distinguish the latter as a *cause*, from a *form* assumed by the malady itself. Few cases could be clearly traced to those religious controversies which have of late so extensively prevailed. In two young males, vice was evidently the cause, the form assumed by the disease in both being the same—namely, *Acute Dementia*. In one case insanity immediately followed a trial of the cold-water cure; in another the use of Morrison’s pills; while it is instructive to note, that in another case loss of blood was the exciting cause of the malady, which took the form of *Dementia*. In Table XII. the epileptics and paralytics admitted are arranged in connexion with the forms assumed by the mental disorder, which, it will be observed, was in those cases generally that of *Dementia*. The paralysis, in every instance but one of paraplegia, was present in the well-known form of the *Paralysie des Alienes*, which, commencing with the slightest indistinctness of utterance and unsteadiness of gait, runs too surely a fatal course, first, through a period of extravagant delusion and excitement, and next of utter prostration of all the faculties, both of body and mind. From Table XIII. it will be seen that in 69 the malady had lasted more than one year before admission. In Table XIV. are exhibited the forms of the disease in the 90 cases which were discharged *recovered*, and from this it appears, as usual, that *Mania*, although the most violent, was the most curable form, next to it *Melancholia*, and then *Monomania*; while only *three* were cases of recovery from *Dementia*. As *Dementia* is the natural termination of all the other forms, when unchecked by treatment, the importance of attempting to arrest insanity



before it has reached this stage cannot be too often illustrated. Table XV. calls for no remark.

In the Table of Deaths will be found the most interesting facts regarding this important part of the returns. In all the fatal cases but three, in which the consent of the friends was withheld, there was a *post mortem* examination—a proceeding which is always desirable, for verifying the apparent cause of death, completing the history of the cases, and thus throwing light on the pathology of the disease. It will be remarked in how many cases tubercular disease was the cause of death, or existed as a complication of the insanity. By more extended returns, the scrofulous and insane constitutions are shewn to be nearly allied. In four of the number the tubercular disease was present in the form of phthisis; in one very interesting case, in the form of tubercle of the brain, causing death by coma. General paralysis carried off three; paralysis, in the form of paraplegia, one; combined old age and exhaustion was the cause in four, one of whom had been an inmate of the Institution since its commencement, upwards of thirty years ago. A male patient died of pneumonia at an early stage of the malady, presenting an example of the little resistance which the insane offer to attacks of acute disease. To suicide, in spite of all precautions, one case is unfortunately to be referred. No death was referable to maniacal exhaustion, which, there is reason to believe, may often be averted by husbanding the patient's strength in the early stages of maniacal excitement.

The appearances observed within the head very uniformly were increased vascularity of the membranes, and especially opacity of the arachnoid, varying from a very slight degree, as in case No. 12, in which the attack of mania might be regarded as the delirium of the last stage of phthisis, to an extreme degree, as in the cases of general paralysis, Nos. 2, 6, 14, in which it was accompanied with an effusion of lymph serum into the subarachnoid tissue, and a copious effusion of the same fluid into the ventricles. It is a remarkable fact that this so commonly observed opacity of the serous covering of the brain is sometimes found equally general over the surface of that organ, in those cases in which the delusion has reference to one train of thought, as in others in which the faculties of the mind are more generally involved.

In the general management of the Institution I have endeavoured to make the means at my command—medical, moral, and hygienic—effective toward mitigating or removing the afflicted condition of the inmates. Less required to be done than in some former years, in the way of remodelling or organizing any part of the Institution; and my duties have been confined to carrying on the system before established—

one founded, it is wished, on justice and humanity. It would be out of place here to enter into detail as to the treatment adopted; but I may make some general remarks on the subject, by way of indicating some principles established by experience in asylums, but, perhaps, not fully recognised elsewhere.

It is scarcely necessary to say that insanity is a bodily disease affecting the brain, the organ of the mind. To this organ attention is first directed, and the same principles applied to its treatment as to other organs of the body when diseased. In this, as all other cases, the earlier the appropriate remedies are used the greater is their success—an axiom which it might be thought unnecessary to state were it not often practically forgotten. The affection of the brain is, however, often secondary to derangement of other organs or functions, and the removal of such complications becomes one of the clearest indications in the medical treatment of the insane. Success does not always immediately follow any means adopted; for insanity is by far most frequently a chronic malady, and *time* itself, with that abstraction from exciting causes which an asylum secures, becomes a most important element in the cure. Even in its most violent forms the cerebral disorder is rarely to be cut short in its course by heroic remedies. In the case of some patients I have had reason to regret that the treatment before admission had been only too vigorous; and that while venesection had been prudently avoided, and the abstraction of blood from the head only cautiously had recourse to, antimonials and purgatives had been administered with no sparing hand, and the diet kept at too low a standard. All observation shews, that, in a large proportion of the insane, the constitution has been originally weak; and that where it has been otherwise, the disease has the effect of weakening and depressing it. This remark applies particularly to the insane poor, for whom remedies of a tonic nature are most frequently attended with beneficial effects; and the exhibition of wine itself is often found to allay, rather than to increase excitement. Hygienic means in their case become more important than medical, and abundant and nutritious food, warm clothing, good air, and exercise kept within the bounds of fatigue, might almost replace the pharmacopœia. The most certain result of active treatment, long continued, is prematurely to induce dementia.

In the moral treatment of the inmates, it is a principal object to provide the means of affording healthy exercise to all the faculties, bodily and mental. As tastes and pursuits vary according to rank, education, &c., it becomes important to afford such as are suitable to these varied conditions. Thus resources of a more intellectual nature are required for the higher



classes ; trades and employments for the lower ; amusements for all. The best organized institution must still be wanting in some of the advantages and pleasures which social life affords to the sane ; but, happily, a great proportion of the inmates need not be confined to those within their retreat. The society of their friends at home may be enjoyed, objects of interest elsewhere visited, and higher exercises of self-control called forth in joining the innocent amusements and gaieties of which the sane partake. To the inmates of the higher classes, books, newspapers, music, billiards, and bowls afford resources. During the year a Botanic Garden has been formed, which will, I hope, prove a source of interest, not less in itself, than by encouraging excursions into the country for the purpose of adding to its stores.

In the case of a large proportion of the patients, to whose habits it is congenial, agricultural work continues to afford occupation. The trades before introduced are now carried on with great zeal, of which the best proof is afforded by the fact that during the year work to the amount of £337 passed through the carpenter's shop—£78 through the shoemaker's—and £121:17s. through the tailor's. To a clergyman, a schoolmaster, a sculptor, a drill-serjeant, and the editor of a newspaper, *professional* duties have been assigned, by which, while the appropriate exercise of their own faculties has been afforded, they have contributed to the general benefit of the household. In this respect an asylum is a little world, in which, while all find some advantage in following their own pursuits, the general good is promoted. True to the analogy, in our microcosm there are some who remain idle, in spite of all arguments addressed to their self-interest or to higher principles. In alluding to the occupations, I must not omit to mention such as fall to female hands, which are busied in the various ways of sewing, embroidering, knitting, and the indispensable labours of the laundry and kitchen.

Among amusements which never lose their attractions is the weekly ball and concert, which, in winter and summer, at fashionable and unfashionable seasons, is a source of equal interest. To say that the proceedings are decorous merely, would scarcely be just : they are marked by a propriety of demeanour and grace which could not be surpassed by any assemblage. If the amusements are varied by the display of the instructive or amusing phantasmagoria of the magic lantern, by the performance of Punch, by the distribution of refreshments, or by the comic song, sung by a willing inmate, the same spirit is manifested—one not of indifference or want of interest in what is passing, but of quiet and well-regulated enjoyment. The meetings of the patients for religious worship are equally marked by the demeanour suitable to the oc-



casation. The interruptions which such events as I have alluded to make, in a life but too apt to be monotonous, are productive of good, and may sometimes prevent the mind from sinking, or sinking so soon, into a state of hopeless imbecility. One poor idiot among the inmates has just two ideas—attendance at the church on Sunday and at the ball on Thursday; without these he would have none.

The question of restraint has lost its interest; for, even in asylums where its use is continued, it is employed to a very limited extent. It is, however, important to report, from time to time, on this subject. In 1843 I took occasion to mention that personal restraint had then been disused for nearly three years, and I have never since seen occasion to have recourse to it. During the above period, the Institution has been conducted on the principles of non-restraint, and no accident has occurred which restraint could have averted, while the best moral effects have followed its disuse both on attendants and patients.

In connection with the care and treatment of the inmates, I beg to repeat the same favourable opinion of the Dormitory system which I expressed in my Report for 1842, confirmed as this has been by longer experience of its practical operation. The system has since received the approval of the Metropolitan Commissioners on Lunacy. I am not aware that in any other institution in this country it has been carried out so far, which may add to the weight of the testimony now borne in its favour. Where an opposite opinion has been expressed, it has been founded, I imagine, on experience in asylums in whose arrangements dormitories form the exception to the rule. It must be borne in mind that it is an essential element for the success of this system that the attendants sleep in the same apartments as the inmates. Where this condition is omitted, it appears to me to be less commendable. The presence of the attendants secures many advantages. The inmates thus remain under observation by night as well as by day, and an opportunity is afforded to their attendants of addressing the language of comfort and encouragement to the desponding, or of rebuke to the unruly, at the season when often most required. A more kindly feeling becomes established between attendants and patients; for, is it not less likely that harshness will be used by the former, when they are thus thrown at the mercy of the latter during the hours of the night? A certain number of single apartments is absolutely necessary for the violently maniacal; but in this Institution it is always esteemed a step toward improvement or recovery when a patient is transferred from the cell to the dormitory. The latter indeed is preferred by the inmates themselves, who dislike the solitariness of the former. On hygienic grounds

the system is much to be preferred; for the ventilation, heating, and cleaning of an institution so constructed, are more easily and efficiently accomplished than in one formed on the system of single cells. Were I to add that it is more economical, I would myself suspect the argument as one which can seldom be safely applied to questions connected with the care of the poor.

It has been said that the system is attended with the evil of impairing the health of the attendants, and harassing them unnecessarily. Were it so, I would not advocate it; for whatever adds to the *desagremens* of that office throws a direct impediment in the way of elevating the standard of qualifications for it—not the least important among the objects to be aimed at in improving the organization of hospitals for the insane. But experience, thus far, has shewn that attendants have retained their health and efficiency in at least an equal, if not in a greater degree, than under another system; and I am strongly inclined to think that an arrangement which renders inmates more tractable and attendants more kind, will promote the health of both. To take a more extended view of the matter, dormitories form only a part of a system which looks much to the influence of *society* for restraining, humanizing, and refining, the inmates of an asylum.

Among the more important events of the year there is to be recorded the addition made to the accommodation of the Institution, by the extension of the New Department. The large hall thus provided has already proved an important acquisition, by permitting a greater proportion of the inmates than before to assemble together for common objects of amusement or instruction. The workrooms are also a great acquisition, by affording ample scope for that most interesting feature of an asylum—in-door trades and employments. Such has hitherto been the pressure on the Institution, for the admission of patients, that rooms formerly destined for this end have been compelled into the service of dormitories or refectories; and there is some reason to fear, that, ample as our accommodation may appear to be at present, similar inconvenience may, ere long, be experienced. Besides additional new buildings, some modifications have been made in the old. Of these the most important has been the alteration in the arrangement of the airing yards. Numerous small airing yards become unnecessary when there are ample surrounding grounds, and the means of complete classification within doors. It is better that they should be few but spacious, and made to assume the form of gardens. It is essential that any noisy inmates should be kept apart from the tranquil.—Acting on these views, three airing yards on the male and female sides of the new building have been converted into one, while the en-



closures attached to the separate building for the noisy patients have been much enlarged. By these modifications the building has been deprived of a forbidding aspect, which numerous radiating walls and enclosures imparted to it; and the alterations, now tested by experience, are regarded and appreciated as improvements by all. It is important to put on record the experience of the Institution on this point, as it appears to me to be a common error in the construction of asylums, to multiply airing yards, with the view of providing ample means for carrying out the very important object of the proper classification of the inmates. My views on this subject, it is to be understood, are only applicable when the surrounding grounds are ample, and when these and the adjacent country are taken advantage of for affording exercise to the inmates. It appears to me that, to limit a patient's enjoyment of the breath of heaven to a space bounded by four walls, when such restraint is not absolutely necessary, is to be wanting in humanity, and incur the opprobrium of neglecting valuable remedial means for restoring and re-involving the bodily and mental powers.

I may here allude to the measures taken to procure a more plentiful supply of water to the Institution. This necessary has hitherto been obtained from the Water Company, but the supply has proved inadequate at all seasons, and during the summer been often altogether wanting. To provide at least an alternative source, a well has been dug, and a steam-engine will soon be erected, in order to propel the water thence derived to all parts of the establishment. In an asylum abundance of water is important, not in a hygienic point of view only.—Baths are among the most valuable of its *medicamenta*. The shower-bath, tempered in winter to suit weak and debilitated constitutions, and cold in summer, proves one of the best tonics, when the bodily and mental powers are in a state of torpor; while in cases of prolonged excitement in persons of depraved habit and constitution, the warm or tepid bath, without diminishing the strength, soothes and tranquilizes, and aids the effect of other calmative remedies.

During the year our Museum has received large accessions. The collection of casts of the heads of patients now numbers 60, and is receiving frequent additions. Among the number there are some remarkable for their large, others for their small size. Some are very deficient in symmetry; others present peculiarities affecting in various other ways the regions of the intellect, the sentiments, and the propensities. Some would be considered good heads; many very bad. In some, the character of the insanity has corresponded remarkably with the phrenological developement; in others, such connection cannot be remarked. The physiognomy, which is well preserved,



is generally very characteristic. The collection of plans of asylums obtained principally by interchange, now embraces those of most institutions in this country, besides some foreign ones. Of some asylums there are no published plans. It is most desirable that these should be published in all cases; for the most important considerations in regard to the care, comfort, and recovery of the inmates of a lunatic asylum are involved in its construction. In the museum is also deposited a collection of works on Insanity, which it is intended to render as complete as possible.

In the course of the year we have been called upon to decide whether Criminal Lunatics should be received into the Institution at all, and if so, upon what conditions. To the inquiries made by the Prison Board of Edinburgh, whether accommodation could be afforded for a male patient of this description, it was replied, after due inquiry into the circumstances of the case, that the patient could be received for treatment as an ordinary inmate;—not for confinement as a prisoner. The Edinburgh Prison Board having referred this reply to the General Board, the following letter was received from the Secretary to the former:—

“ EDINBURGH, 29th November 1844.

“ SIR,—Referring to your letter of 20th instant, informing me that you have succeeded in making arrangements for the reception of the patient ——— in the Morningside Asylum, I shall be obliged by your acquainting me, for the information of the *General Board*, whether the system of treatment, &c., in operation at the Asylum, be such as to ensure the close and safe custody of the patient. An early answer will oblige.—  
I am, &c. (Signed) “ WM. MURRAY.

To DR MACKINNON.

To this the following answer was returned:—

“ ROYAL EDINBURGH L. ASYLUM 1st December 1844.

“ SIR,—In reply to your letter of the 29th ult., I beg to say that the system of treatment pursued in the Institution is not such as to ensure the *close and safe custody* of the inmates. For this nothing less than the arrangements of a prison are required, and we *aim* at rendering the Institution as little prison-like in its arrangements as possible. We regard an asylum simply as an hospital for the treatment of a particular class of maladies—viz., those affecting the nervous system—and select the arrangements and means of treatment which we conceive best adapted to promote the object of recovering the inmates. With such treatment we regard a system of confinement incompatible. For *close and safe custody* the single

cell, bars, high walls, and much restraint are indispensable. For *recovery*, society, occupation, a cheerful abode, and much liberty are required. We do not forget that we are entrusted with the care of persons unable, like children, to take care of themselves; but we look for this to the vigilance of attendants whom we aim at making the companions as well as the guardians of those confided to their charge. Such vigilance, unaided, as it often is, when patients are without the enclosures of the Institution, is not to be depended on, (I need not say,) for the *close and safe custody* of a person in the relation to society of a criminal lunatic, and we are therefore unwilling to receive such patients. We think that a lunatic establishment, with appropriate arrangements, is required for persons to whose safe keeping such a high degree of responsibility is attached. We are the more convinced of this from the fact that the persons acquitted from punishment on account of insanity are not unfrequently persons whose mental condition hovers between sanity and insanity—in whom it is difficult to say how much is mental derangement, how much a depraved morale—and for whose custody the arrangements of a prison are demanded. We are unwilling, in order to obtain the requisite security for a few such patients, to adopt a system which would abridge the liberty of ordinary inmates. Society has a right to expect that there should be no risk of such persons escaping from confinement. In the case of ordinary insane patients, we rather run the risk that they should escape from that degree of confinement which we adopt, than that they should not recover, or even be rendered as happy and comfortable as their condition will admit of.—I am, &c.

(Signed) “W. MACKINNON.

To WILLIAM MURRAY, Esq.”

After some time the patient was sent for treatment as an ordinary inmate. The correspondence is published, as it involves an important principle. It appears to me clear that criminal lunatics should not be received, at least as such, into ordinary lunatic asylums. While many of this class of individuals do not differ in any respect from other insane persons, there are some who, from circumstances connected with their history, ought not to be associated with the other inmates of an asylum. Moreover, lunatic asylums, constructed as they generally are, and, it may be added, ought to be, do not afford the necessary security for such patients. For them, a separate criminal lunatic establishment seems to be required. The system of treatment pursued in such an institution need differ in no respect from that of other asylums; but there might be some additional precautions for the safe keeping of the inmates, and the establishment made to assume, at least exter-



nally, the aspect of a penitentiary. The existence of such an institution would exercise a salutary influence on many persons in society prone to eccentricities which take the form of crimes, but who are not altogether insensible to considerations which weigh with ordinary minds. Whatever plan it is best to adopt in regard to the care of such patients, there can be no doubt that, so long as they are received into ordinary hospitals for the insane as prisoners, they will prove a great impediment to the improvement of these institutions.

The reports of lunatic asylums, as of other institutions, are apt to become laudatory and congratulatory from habit. It seems to be forgotten that failings might be recorded with advantage, and defects brought prominently under view. Much still remains to be done in order to make our Institution realize all that an hospital for diseases of the mind ought to be. The desiderata that I would enumerate at present would require more ample funds for their supply than are at command; but the acknowledgment of this very fact may suggest to some, into whose hands this report may come, to direct their benevolence into a channel in which it may most beneficially flow. The grand defect of the buildings is the separation at so great a distance of its two departments, and the defects of construction of that appropriated to the higher classes. No mere alterations or additions to the latter would fit it for adequately meeting the wants of the inmates of this class, but perhaps it would be too much to expect that a new building should be erected at present. So soon as the proposal can be entertained by the Managers, no time should be lost in giving it serious consideration.

In the staff a resident chaplain and teacher would be an acquisition. While the Sunday services and the visitation of the sick are faithfully performed by the present chaplain, the daily prayers are read by lay officers, whose time is required for other duties. In teaching there is a wide field of usefulness in an asylum—a field yet only imperfectly explored, but promising in a very high degree. From experiments made on a considerable scale here and elsewhere, there is no doubt that much may be done in the education of imperfectly developed minds, and in re-training the faculties of those who from disease have returned to the intellectual condition of infancy. A fund of the nature of that founded by the benevolent Queen Dowager, for the benefit of the Hanwell Institution, for affording the means of support to poor patients otherwise unprovided for when discharged from the asylum, would be very merciful in its operation. The small remuneration which can be afforded for work done in the asylum—an increase of which is to be included in our desiderata—only meets certain cases, and those not adequately. A retiring fund for superannuated at-



tendants would scarcely be less benevolent in its operation. Their duties, if well performed, are meritorious in the highest degree, while they are of a nature such as to exhaust, perhaps prematurely, the mental and bodily powers. The establishment of such a fund would be another means of forwarding that object which yields in importance to none, namely, the elevating the standard of education and general qualification for the office.

In conclusion, I beg to express my obligations for the kind support of the Managers, and the cordial co-operation of the office-bearers of the Institution which I have enjoyed during the year. To my Medical Assistants my best thanks are due—in particular to Dr Taylor, for his attention to the records of the Institution, of which the Tables appended are results; and to Dr Skinner, (whose departure for another appointment occasioned a loss not easily to be supplied,) for his benevolent and successful labours in the Western Department.

W. MACKINNON, M.D.

# TABLES.

TABLE I.—*Exhibiting the General Results of the Year.*

	Males.	Females.	Total.
Number of Inmates at the close of 1843,	146	138	284
Admitted during the Year 1844, . . .	83	79	162
Discharged, . . . . .	59	64	123
{ Of whom were recovered, . . .	38	52	90
{ More or less improved, . . .	21	12	33
Died, . . . . .	11	9	20
Number of Inmates at the close of 1844,	159	144	303

TABLE II.—*Exhibiting the Ages of those Admitted.*

	Males.	Females.	Total.
From 10 to 20, . . . . .	6	2	8
20 to 30, . . . . .	24	17	41
30 to 40, . . . . .	24	23	47
40 to 50, . . . . .	18	19	37
50 to 60, . . . . .	8	8	16
60 to 70, . . . . .	2	10	12
70 to 80, . . . . .	1	—	1
Total, . . . . .	83	79	162



TABLE III.—*Social Condition of those Admitted.*

	Males.	Females.	Total.
Married, . . . . .	31	28	59
Single, . . . . .	51	48	99
Widowed, . . . . .	1	3	4
Total, . . . . .	83	79	162

TABLE IV.—*Religion of those Admitted.*

	Males.	Females.	Total.
Established Presbyterians, . . . . .	45	49	94
Free Church, . . . . .	4	8	12
Dissenters, . . . . .	17	17	34
Episcopalians, . . . . .	6	2	8
Roman Catholics, . . . . .	5	2	7
Jew, . . . . .	1	—	1
Unknown . . . . .	5	1	6
Total, . . . . .	83	79	162

TABLE V.—*Education of those Admitted.*

	Males.	Females.	Total.
Well educated, . . . . .	18	17	35
Can read and write, . . . . .	56	51	107
Can read only, . . . . .	4	10	14
Can neither read nor write, . . . . .	5	1	6
Total, . . . . .	83	79	162

TABLE VI.—*Occupations of those Admitted.*

	Males.	Females.	Total.
Agricultural Labourers, . . . . .	11	7	18
Bakers and Wife of a Baker, . . . . .	4	1	5
Clergyman, and Wives of Clergymen, . . . . .	1	2	3
Clerks, and Wife of a Clerk, . . . . .	3	1	4
Coach Painters, . . . . .	2	0	2
Constables and Wife of a Constable, . . . . .	4	1	5
Domestic Servants, . . . . .	3	26	29
Dress-makers, . . . . .	0	9	9
Dyer, . . . . .	1	0	1
Editor of a Newspaper, . . . . .	1	0	1
Employed at a Factory, . . . . .	0	3	3
Farmers, . . . . .	2	0	2
Fisherman, and Wife of a Fisherman, . . . . .	1	1	2
Gentlewomen, . . . . .	0	9	9
Governesses, . . . . .	0	2	2
Jeweller, . . . . .	1	0	1
Joiners and Wife of a Joiner, . . . . .	6	1	7
Knitter, . . . . .	0	1	1
Mason, Wife of a, . . . . .	0	1	1
No occupation, . . . . .	6	1	7
Pedlars, . . . . .	2	0	2
Plumbers, . . . . .	2	0	2
Porters, Wives of . . . . .	0	2	2
Printer, and Wives of Printers . . . . .	1	2	3
Sailors, . . . . .	4	0	4
Shoemakers, . . . . .	3	0	3
Shopkeepers, . . . . .	4	3	7
Smiths and Wives of Smiths, . . . . .	2	2	4
Soldiers and Wife of a Soldier, . . . . .	2	1	3
Students of Divinity, . . . . .	2	0	2
—— of Medicine, . . . . .	3	0	3
Tailors, . . . . .	4	0	4
Tavern-Keeper, . . . . .	0	1	1
Teachers and Wife of a Teacher, . . . . .	2	1	3
Weavers, . . . . .	2	0	2
Writer and Accountant, . . . . .	2	0	2
Unknown, . . . . .	2	1	3
Total, . . . . .	83	79	162

TABLE VII.—*Temperaments of those Admitted.*

	Males.	Females.	Total.
Nervous, . . . . .	12	16	28
Lymphatic, . . . . .	19	16	35
Sanguine, . . . . .	24	16	40
Bilious, . . . . .	25	24	49
Nervo-Lymphatic, . . . . .	1	2	3
Nervo-Sanguine, . . . . .	2	4	6
Nervo-Bilious, . . . . .	0	1	1
Total, . . . . .	83	79	162



TABLE VIII.—*Complexion of those Admitted.*

	Males.	Females.	Total.
Xanthous, . . . .	66	68	134
Melanous, . . . .	17	11	28
Total, . . . .	83	79	162

TABLE IX.—*Hereditary Predisposition in those Admitted.*

	Males.	Females.	Total.
Hereditary Predisposition ascertained to exist, but undetermined whether on Paternal or Maternal side, . . .	4	6	10
On Paternal side, . . . .	8	5	13
On Maternal side, . . . .	9	6	15
On both sides, . . . .	2	2	4
Total Hereditary Predisposition,	23	19	42
Hereditary Predisposition not ascertained to exist, . . . .	60	60	120
Total, . . . .	83	79	162

TABLE X.—*Forms assumed by the Disease in those Admitted.*

	Males.	Females.	Total.
Mania, Continued, . . . .	20	31	51
Periodical, . . . .	1	2	3
Puerperal, . . . .	0	2	2
Demonomania, . . . .	2	0	2
Nymphomania, . . . .	0	1	1
Total Mania, . . . .	23	36	59
Delirium Tremens, . . . .	3	1	4
Melancholia, . . . .	13	18	31

TABLE X.—(Continued)

	Males.	Females.	Total.
Monomania of Suspicion, . . .	11	4	15
Unseen Agency, . . .	4	3	7
Fancied possessions, . . .	3	0	3
Pride, . . . . .	1	2	3
Vanity, . . . . .	1	1	2
Total Monomania, . .	20	10	30
Moral Insanity, . . . . .	1	2	3
With Homicidal, and Suicidal impulse,	1	1	2
Total Moral Insanity,	2	3	5
Dementia in form of Imbecility, . . .	11	8	19
Fatuity, . . . . .	9	3	12
Total Dementia, . .	20	11	31
Congenital Idiocy, . . . . .	2	0	2

TABLE XI.—*Exciting Causes in those Admitted.*

	Males.	Females.	Total.
Affront, . . . . .	0	1	1
Cold-Water Cure, . . . . .	1	0	1
Disappointments, . . . . .	0	3	3
Domestic Disquietude, . . . . .	1	2	3
Disappointed affections, . . . . .	4	2	6
Dread of Poverty, . . . . .	0	1	1
Dyspepsia, . . . . .	0	1	1
Fright caused by witnessing Sudden Deaths,	0	2	2
Grief at the Illness or Death of Friends,	0	3	3
Injurious Treatment by Relatives,	1	0	1
Injuries of the Head, . . . . .	5	2	7
Insolation, . . . . .	1	0	1
Intemperance, . . . . .	10	6	16
Loss of Blood from an Injury, . . . . .	1	0	1
Manustupratio, . . . . .	2	0	2
Menstrual Irregularities, . . . . .	0	2	2
Morrison's Pills, . . . . .	1	0	1
Over-Exertion—Mental, . . . . .	3	0	3
Mental and Bodily, . . . . .	1	0	1
Paralysis, . . . . .	1	1	2
Pecuniary Embarrassments . . . . .	5	0	5
and Political Excitement,	1	0	1
Phthisis—Exhaustion from, . . . . .	0	1	1
Puerperal state, . . . . .	0	5	5
Religious Excitement, . . . . .	4	7	11
Rheumatism of Head, . . . . .	0	1	1
Sequela of Small-Pox, . . . . .	1	0	1
Exciting cause not ascertained, . . . . .	40	39	79
Total, . . . . .	83	79	162



TABLE XII.—*Number of Cases in which Paralysis or Epilepsy existed as a Complication.*

	M.	F.	Total.	Mania.		Melancholia.		Monomania.		Dementia.			
				M.	F.	M.	F.	M.	F.	Imbecility.		Fatuity	
										M.	F.	M.	F.
Paralysis,	9	2	11	0	0	1	0	0	0	6	1	2	0
Epilepsy,	2	1	3	1	1	0	0	0	0	1	0	0	0

TABLE XIII.—*Duration of the Malady in those Admitted.*

	Males.	Females.	Total.
Under one year's duration, . . .	46	44	90
More than one year's duration, . . .	35	34	69
Unknown, . . . . .	2	1	3
Total, . . . . .	83	79	162

TABLE XIV.—*Forms of the Disease in those Discharged Recovered.*

	Males.	Females.	Total.
Mania, . . . . .	20	33	53
Melancholia, . . . . .	7	15	22
Monomania, . . . . .	4	3	7
Dementia, . . . . .	3	0	3
Delirium Tremens, . . . . .	3	1	4
Moral Insanity, . . . . .	1	0	1
Total, . . . . .	38	52	90

TABLE XV.—*Period of Residence in the Asylum of those Discharged Recovered.*

	Males.	Females.	Total.
Under 3 months, . . . . .	10	14	24
6 months, . . . . .	12	10	22
1 year, . . . . .	8	18	26
2 years, . . . . .	8	10	18
Total, . . . . .	38	52	90

TABLE XVI.—Of Deaths, with the Post Mortem Appearances.

No.	Sex.	Age	Duration of Insanity.	Period of Residence in Asylum.	Form of Insanity.	Cause of Death.	MORBID APPEARANCES.	
							Within the Head.	In other parts of the Body.
1	F.	62	2 years and a half	6 months and a half	Senile Dementia.	Old age and exhaustion.	Dura mater thickened, and adherent to the cranium. Arachnoid opaque, and contained between its layers several oz. of serum. Lateral ventricles distended with serum. Cerebellum soft.	Anterior edge of left lung adherent to the parietes of the thorax. Both lungs slightly emphysematous.
2	M.	35	3 months.	1 month and a half	Fatuity.	General paralysis and ulceration of intestines.	Dura mater strongly adherent to the cranium. Arachnoid thickened, so as to resemble the dura mater in consistence, and very opaque. Effusion of lymph into the sub-arachnoid cellular tissue. About 3 oz. of fluid in the lateral ventricles.	Right lung adherent to the parietes of the thorax. Both lungs contained tubercles. Numerous ulcerations in the rectum and caput coecum, and a few in the ileum.
3	M.	24	8 years	17 months	Mania.	Tubercle in the brain	A deposit of tubercular matter, about an inch in diameter and a quarter of an inch in thickness, between the dura mater and the upper part of the os frontis. Two masses of tubercle in the right hemisphere—one about the size of a pea, the other the size of a walnut—communicating through a perforation of the temporal bone with a large abscess involving the temporal and coronal regions, and extending under the muscles of the face, and down the neck. Os frontis ulcerated externally and internally in three places. Slight opacity of the arachnoid. Effusion of serum on the surface and base of the brain, and in the ventricles.	Upper lobes of both lungs adhered to the parietes of the thorax, contained several small cavities, and were infiltrated with tubercles. The transverse colon was deflected towards the pubis, and again ascended to the spleen, when it resumed its natural course. Several of the mesenteric glands were enlarged.
4	F.	23	18 months	1 year	Mania.	Phthisis Pulmonalis	Anterior convolutions of the brain remarkably small. Slight opacity of the arachnoid. A considerable effusion of serum on the surface of the brain, into the sub-arachnoid cellular tissue, and the lateral ventricles.	Lungs firmly adherent to the parietes of the thorax. Both lungs were infiltrated throughout with tubercular matter, and contained large cavities, particularly the left, which was almost completely hollowed out. Several small ulcerations of the colon. Liver much enlarged, and presenting the fatty degeneration. Fundus uteri much congested. Right ovary contained several small melanotic deposits.
5	M.	85	Upwards of 30 years.	30 years and a half	Dementia.	Old age and exhaust on.	Dura mater slightly adherent to the cranium. General milky opacity of the arachnoid, with effusion of a large quantity of serum on its surface, and into the sub-arachnoid cellular tissue. Cerebellum im-	Lungs slightly emphysematous, with several loose adhesions on the right side. Concentric hypertrophy of the right ventricle. Signoid valves converted into a



7	M.	50	Since birth	13 months and a half	Imbecility.	Apoplexy supervening on asthma.	Slight opacity of the arachnoid, with effusion of a considerable quantity of serum on its surface, and into the sub-arachnoid cellular tissue. Pia mater very vascular. A clot of blood, about the size of a filbert, between the cerebrum and cerebellum. Lateral ventricles distended with serum.	Both lungs very emphysematous, and adherent to the parietes of the thorax. Bronchial tubes loaded with mucus, and their lining membrane congested. Heart much loaded with fat.	when were firmly matted together, and covered by a thick layer of false membrane. Numerous masses of coagulated lymph, in various stages of organization, floated through the cavity.
8	M.	45	20 years	3 years and 2 months.	Melan- cholia, af- terwards Dementia.	Pneumonia.	Dura matter firmly adherent to the cranium. Partial opacity of the arachnoid, with effusion of serum into the subjacent tissue. Anterior convolutions of the brain small. Cortical substance shallower and paler than usual. Numerous bloody points on slicing the brain.	Extensive old and recent adhesions of both lungs. Effusion of fluid into the right pleura. The lower lobe of the right lung presented a granitic appearance, and parts of it sunk in water. Left lung partially hepatised. Liver enlarged, and adherent to the diaphragm. Granular degeneration of both kidneys.	
9	M.	25	9 years.	6 months	Fatuity.	Coma and pericarditis.	Universal thickening and opacity of the arachnoid, with great effusion of serum on its surface, and into the subjacent cellular tissue. Vessels of the brain congested. Ventricles distended with serum.	Left lung extensively adherent to the parietes of the chest. Both lungs completely infiltrated with tubercles, and containing numerous large cavities filled with pus. About 4 oz. of bloody serum in the pericardium. The whole surface of the heart and serous layer of the pericardium coated with thick lymph of a honey-comb like appearance. Slight hypertrophy of the left ventricle. The descending colon took a very tortuous course, crossing the abdomen twice. Liver enlarged, and partially adherent to the diaphragm. Right kidney contained numerous masses of tubercle, most of which were softened, forming cavities filled with pus. Right ureter enlarged to nearly the size of the little finger, and its coats covered with tubercular matter. Epididymis of the right testis converted into a mass of tubercle the thickness of the little finger. The substance of the testis contained numerous small miliary tubercles.	
10	M.	36	4 years.	6 months.	Monomania of unseen agency, with suicidal propensity.	Suicide.	Opacity of the arachnoid, diffused over nearly its whole extent. Substance of the brain unusually free from bloody points.	The colon, after descending to the left iliac fossa, re-ascended, and made a second arch, before terminating in the rectum.	

TABLE XVI.—(Continued.)

No.	Sex.	Age.	Duration of Insanity.	Period of Residence in Asylum.	Form of Insanity.	Cause of Death.	MORBID APPEARANCES.	
							Within the Head.	In other parts of the Body.
11	M.	52	1 year	9 months.	Imbecility.	Paraplegia.	Opacity of the arachnoid, with considerable effusion of serum into the sub-arachnoid cellular tissue. Lateral ventricles distended with serum to the amount of 3 oz.	No morbid appearances.
12	F.	32	2 months.	12 days.	Mania.	Phthisis.	Very slight opacity of the arachnoid. Anterior lobes and convolutions of the brain unusually small.	Firm adhesions of both lungs to the parietes of the chest. Upper lobes of both lungs contained very large cavities, filled with fetid pus. The lower lobes were infiltrated with tubercle.
13	F.	71	About 18 months	1 year.	Senile Mania.	Old age and exhaustion.	Slight opacity of the arachnoid, diffused in patches over the whole surface of the brain. Great effusion of serum into the lateral ventricles.	Extensive old adhesions of both lungs. Considerable deposition of coagulated lymph within the pericardium, round the attachments of the great vessels. Colon slightly deflected from its natural course. Numerous small abscesses in both kidneys.
14	M.	49	5 years.	7 months.	Dementia.	General paralysis	Milky opacity of the arachnoid diffused over the whole surface of the brain. Considerable effusion of serum on the surface, and into the sub-arachnoid cellular tissue. Puncta sanguinea numerous, and vessels generally congested. Anterior convolutions of the brain remarkably small and numerous.	Right lung firmly adherent to the parietes of the chest. Lower half of the right lung was covered with recent false membrane, and the upper lobes of both lungs contained numerous milary tubercles. Texture of the heart much softened. Kidneys lobulated.
15	F.	58	1 year.	6 months and a half	Senile Dementia.	Old age and exhaustion.	Dura mater strongly adherent to the cranium. Slight opacity of the arachnoid. The lateral ventricles contained a small quantity of serum, and there was a slight earthy deposit in the coats of the vessels at the base of the brain.	The liver presented the appearance usually denominated Drunkard's Liver.



17	M.	28	Several years	2 years and a half	Melan- cholia.	Phthisis and peritonitis.	Anterior clinoid processes abnormally large. Slight opacity of the arachnoid, with effusion of serum on the surface, and into the sub-arachnoid, cellular tissue. Puncta sanguinea numerous. Lateral ventricles distended with serum. The convolutions of the brain generally were of small size.	Extensive adhesions of the lungs, both of which were completely infiltrated with tubercle, and contained numerous cavities. Several oz. of serum in the pericardium. Liver much enlarged. The whole contents of the abdomen were firmly matted together, and the peritoneum was covered with deposits of tubercular matter of various sizes.	ney contained a small cyst.
18	F	72	Many years.	7 years and a half	Melan- cholia.	Old age and exhaustion.	No examination permitted.		
19	F.	63	3 months.	24 days	Senile Dementia.	Old age and exhaustion, and erysipelas of foot.	No examination permitted.		
20	F.	17	3 months.	2 months and a half	Mnna.	Phthisis.	No examination permitted.		

